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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,772	12/19/2006	Patrick Roman Amaru	AMRY0101PUSA	5977
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BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			KIM, HEE-YONG	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,772	Applicant(s) AMARU, PATRICK ROMAN	
	Examiner HEE-YONG KIM	Art Unit 2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/15/2006</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 7 and 10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the coordinate and the mobile telephone and the location of the viewer" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the compass" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mainardi (US 2,313,562) in view of Schoolman (US 5,281,957), (hereafter referenced as Mainardi and Schoolman respectively), further in view of official notice.

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Regarding **claim 1**, Mainardi discloses Stereoscope. Specifically Mainardi discloses A portable device (Fig.1) for viewing an image, in particular a stereo image (stereoscopic image, pp.1, right col., line 51), comprising a housing (Fig.1), in which an image, an optical unit (Fig.2) and two viewer openings (Two Oculars 11, Fig.1) are provided. However Mainardi fails to disclose characterized in that the image is generated by means of an electronically drivable display, and in that means are provided in such a way that the electronic image data made available to the display are provided in an image memory integrated in the housing and/or from an external image data unit via an interface in a wireless manner.

In the similar field of endeavor, Schoolman discloses Portable Computer and Head Mounted Display. Schoolman specifically discloses characterized in that the image is generated (Left and Right Video Display Generators, Fig.10) by means of an electronically drivable display (LCD, col.3, line 2), and in that means (Computer memory or Mass storage, Fig,10) are provided in such a way that the electronic image data made available to the display are provided from an external image data unit (Central Computer, Col.4, line 67) via an interface in a wireless manner (Wireless LAN and Bluetooth network were well known in the art), in order to display moving map (col.7, line 60-63). Mainardi discloses that the input image source is a film which has two stereo images adjacent to one another in opposite directions (pp.1, left col., line 39-42). It was obvious that the film can be substituted by two LCD's of Schoolman but with opposite directions, in order to provide dynamic image such as moving map.

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Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi by substituting a film with the Schoolman two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, in order to display moving map. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, has all the features of claim 1.

Regarding **claim 2**, the Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, as applied to claim 1, discloses characterized in that an electronic control unit (Schoolman: Left and Right Video Display Generators, Fig.10) is provided for driving the display.

Regarding **claim 3**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). Mainardi further discloses characterized in that the optical unit comprises a lens and/or reflector arrangement (Fig.2) in such a way that the image displayed by the display is magnified and/or imaged sharply (focusable, pp.1, left col., line 36).

Regarding **claim 9**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). However, Mainardi fails to disclose the image memory is formed as a plug-in card.

However, Schoolman discloses portable computer and it was well known in that the computer has interface to plug-in card such as PCMCIA card as one alternative way of memory access.

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi by specifically providing PCMCIA interface to the Schoolman portable computer and PCMCIA card which stores image information, in order to retrieve the image from PCMCIA as alternative. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the PCMCIA interface to the Schoolman portable computer and PCMCIA card which stores image information, has all the features of claim 9.

5. **Claims 4 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mainardi in view of Schoolman, further in view of Tso (US 6,047,327), and further in view of official notice.

Regarding **claim 4**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). However, Mainardi and Schoolman fail to disclose

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characterized in that the image data can be downloaded from the central image data unit (23) via the air interface if appropriate with inclusion of a mobile telephone (21).

In the similar field of endeavor, Tso discloses System for Distributing Electronic Information to a Targeted Group of Users. Tso specifically discloses that the image data (map, col.5, line 54-65) can be downloaded (download, col.1, line 15) from the central image data unit (server 17, Fig.1) via the air interface (Fig.2 cellular telephone network), if appropriate with inclusion of a mobile telephone (cellular telephone, col.2, line 49), in order to provide a map based on user's location (col.14, line 21-34).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi and Schoolman by providing specifically a cellular telephone which can download maps from a server through cellular network and storing maps by communicating a cellular phone with Schoolman's computer through Bluetooth network (well known in the art), in order to provide a map based on user's location. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the Tso cellular telephone which can download maps from a server through cellular network and storing maps by communicating a cellular phone with Schoolman's portable computer through Bluetooth network, has all the features of claim 4.

Regarding **claim 7**, the Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is

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driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the Tso cellular telephone which can download maps from a server through cellular network and storing maps by communicating a cellular phone with Schoolman's portable computer through Bluetooth network, as applied to claim 4, discloses that the coordinate fields detected by a base station in which the mobile telephone is situated can be used for determining the location of the viewer (Tso: Cellular network always knows the location of each terminal as long as it is within a base station, col.16, line 30-33).

6. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mainardi in view of Schoolman, further in view of Beier (US 2003/0,227,453), and further in view of official notice.

Regarding **claim 5**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). However, Mainardi and Schoolman fail to disclose that the image data can be calculated by means of a computational model, in particular one according to the VRML/X3D standard.

In the similar field of endeavor, Beier discloses Method, System and Computer Program for Automatically Creating an Animated 3-D Scenario from Human Position and Path Data. Beier specifically discloses that the image data can be calculated (Screen Viewer, Fig,2) by means of a computational model, in particular one according to the VRML/X3D standard (VRML, X3D, paragraph 167), in order to provide 3-D image from human position (abstract).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi and Schoolman by providing specifically screen viewer which can generate 3-D image based on VRML/X3D standard, in order to provide 3-D image from human position. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the Beier screen viewer which can generate 3-D image based on VRML/X3D standard, has all the features of claim 5.

7. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mainardi in view of Schoolman, further in view of Takenaga (US 2001/0,050,631), and further in view of official notice.

Regarding **claim 6**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). However, Mainardi and Schoolman fail to disclose a location determination unit is accommodated in the housing in such a way that, depending on the location of the housing or the viewer, the display can be assigned an image corresponding to the location of the housing or the viewer.

In the similar field of endeavor, Takenaga discloses Portable Terminal Apparatus and the Positional Information Communication Method Using It. Takenaga specifically discloses a location determination unit (GPS receiver 16, Fig.1) is accommodated in a housing (Cellular phone, paragraph 2) such a way that, depending on the location of the

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housing or the viewer, the display can be assigned an image corresponding to the location of the housing or the viewer (display the current location superimposed on the map data, paragraph 4), in order to display a current location on a map (paragraph 4).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi and Schoolman by providing specifically accommodating GPS in a Mainardi housing such that GPS provide a current location and map to display on the Mainardi stereoscope, in order to display a current location on a map. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating accommodating the Takenaga GPS in a Mainardi housing such that GPS provide a current location and map to display on the Mainardi stereoscope, has all the features of claim 6.

8. **Claims 8 and 10-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mainardi in view of Schoolman, further in view of Johnson-Williams (US 5,523,886) (hereafter referenced as Johnson-Williams), and further in view of official notice.

Regarding **claim 8**, Mainardi and Schoolman disclose everything claimed as applied above (see claim 1). However, Mainardi and Schoolman fail to disclose that means are provided in such a way that stereo images are generated continuously in

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real time as an image sequence depending on the orientation of a compass integrated in the housing at the viewer's location.

In the similar field of endeavor, Johnson-Williams discloses Stereoscopic/Monoscopic Video Display System. Johnson-Williams specifically discloses that means (Fig.1B) are provided in such a way that stereo images are generated continuously in real time (virtual reality program, col.3, line 18) as an image sequence depending on the orientation of a compass (compass, col.8, line 11) integrated in the housing (head tracker, col.8, line 9-10) at the viewer's location, in order to provide stereoscopic images based on user's orientation.

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi and Schoolman by providing specifically virtual reality program with compass, integrated in the Mainardi housing, which generates stereo images based on the orientation of the compass , in order to provide stereoscopic images based on user's orientation. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the Johnson-Willimas virtual reality program with compass, integrated in the Mainardi housing, which generates stereo images based on the orientation of the compass, has all the features of claim 8.

Regarding **claim 10**, the Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is

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driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the Johnson-Williams virtual reality program with compass, integrated in the Mainardi housing, which generates stereo images based on the orientation of the compass, as applied to claim 8, teaches that the compass (Johnson-Williams: compass, col.8, line 11) is formed as a magnetic sensor (well-known in the art) for determining the horizontal component of an orientation vector.

Regarding **claim 11**, Mainardi and Schoolman discloses everything claimed as applied above (see claim 1). However, Mainardi and Schoolman fail to disclose that that an inclination sensor is formed for determining the vertical component of the orientation vector.

Johnson-Williams specifically discloses that an inclination sensor (bubble level, col.8, line 9-13) is formed for determining the vertical component (direction of gravity, col.8, line 9-13) of the orientation vector , in order to provide stereoscopic images based on user's orientation.

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Mainardi and Schoolman by providing specifically virtual reality program with inclination sensor, in order to provide stereoscopic images based on user's orientation. The Mainardi stereoscope, incorporating substituting a film with two LCD screens adjacent to each other but with opposite directions which is driven by Left and Right image generators where image is downloaded from central computer via wireless network, further incorporating the

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Johnson-Willimas virtual reality program with inclination sensor, which generates stereo images based on the orientation of the viewer, has all the features of claim 11.

9. **Claims 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman.

Regarding **claim 12**, Schoolman discloses A method for producing an image (Fig.1), in particular a stereo image (stereo right-left video, col.3, line 31-33), which is generated in a portable housing (Module 3 (in Fig.1) contains most of display electronic, col.5, line 10-13), characterized in that means are provided in such a way that, from the current location (GPS receiver, col.7, line 67) of the housing, images identifying the environment thereof are provided in an electronic display (moving map can be displayed, col.7, line 60-62).

Regarding **claim 13**, Schoolman discloses everything claimed as applied above (see claim 1). Schoolman further disclose that the current location is determined by means of a location determination unit (GPS receiver, col.7, line 67) integrated in the housing (Examiner maintains that it was obvious to try integrating GPS in the housing, in order to make a whole system compact). However, Schoolman fails to disclose that the images identifying the current location are then downloaded from a central image data unit via the air interface.

However, Schoolman discloses a central computer on the network (col.4, line 66 and 67). And it was well known in the art that a central computer can serve database on the network either wired or wireless.

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Schoolman by providing specifically central computer serving map information and downloading the images identifying the current location from a central computer via the wireless network, in order to retrieve the map data from central computer. However, the Schoolman portable computer and stereoscopic display, incorporating GPS in the housing, further incorporating central computer serving map information and downloading the images identifying the current location from a central computer via the wireless network, has all the features of claim 13.

Regarding **claim 14**, Schoolman discloses everything claimed as applied above (see claim 1). Schoolman further discloses images of a predeterminable location are provided by means of an integrated control unit (Mass storage 74, fig.10).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEE-YONG KIM whose telephone number is (571)270-3669. The examiner can normally be reached on Monday-Thursday, 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HEE-YONG KIM/
Examiner, Art Unit 2482

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art
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